# Appendix G

*Biological Report*

# VINTNER'S SQUARE
# SPECIAL-STATUS SPECIES REPORT
# AND WETLANDS PEER-REVIEW

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# ENVIRONMENTAL SETTING

## GENERAL PROJECT AREA DESCRIPTION

The project site is located within the southwest portion of the City of Lodi, San Joaquin County, California. It occupies about 29 acres on the northeast corner of Highway 12 (Kettleman Lane) and Lower Sacramento Road, approximately 6 miles east of Interstate 5. Land uses in the surrounding area consist mostly of agriculture (row crops and orchards) to the north, west, and south of the project site, and urban (commercial and residential) associated with the City of Lodi, northeast of the site. A shopping center is located immediately east of the project site, on the east side of Lower Sacramento Road. The project site occurs on the Lodi South U.S. Geological Survey (USGS) Quadrangle map.

The site was formerly maintained for row crop agriculture, but is currently dominated by non-native herbaceous forbs and grasses. In a previous, independent survey for this site, conducted during June 2002, EIP Associates reported that the site had been recently disked (EIP Associates, 2002). Structures on site include an abandoned agricultural well and associated storage shed in the northwest portion of the site, south of Taylor Road. Site topography is relatively flat with the exception of piles of fill material including dirt, bark mulch, and pieces of asphalt and concrete, in the east-central portion of the site. The elevation of the site is approximately 32 feet.

The project site is underlain by Acampo sandy loam and Tokay sandy loam soils. These are moderately-to-well-drained soils that were formed in alluvium derived from granitic rock sources. They occur on low fan terraces and are considered neutral to mildly alkaline (Soil Conservation Service [SCS] 1992). The mean annual precipitation for this area is 15 inches and the mean annual temperature is 60°F.

## BIOTIC SURVEYS

H. T. Harvey & Associates conducted a reconnaissance-level field survey on 3 January 2003. The purpose of this survey was to document biotic resources associated with the site that may potentially pose constraints to the proposed development, and to evaluate whether these resources received adequate protection pursuant to the San Joaquin County Multi-species Habitat Conservation and Open Space Plan (SJMSCP; San Joaquin Council of Governments 2000). Specifically, the survey was conducted to: 1) describe existing biotic habitats; 2) assess the site for its potential to support special-status species and their habitats; 3) evaluate whether any special-status species likely to use the site received adequate mitigation pursuant to the SJMSCP, and; 4) identify potential jurisdictional habitats including Waters of the U.S. Survey personnel included H. T. Harvey & Associates' plant ecologist Kurt Flaig, and wildlife biologists Dave Plumpton and Ginger Bolen.

## BIOTIC HABITATS

The single habitat type identified on the project site was ruderal field/former agricultural-row crop.

### Ruderal Field/Former Agricultural-Row Crop

**Vegetation.** The project site consisted of a former agricultural field that currently characterized by a predominance of ruderal vegetation. Ruderal communities are assemblages of plants that thrive in disturbed areas, and weedy, non-native annual forbs and grasses are typically the first species to colonize these sites following disturbance. Dominant ruderal species observed on site include field mustard (*Brassica rapa*), filaree (*Erodium* spp.), common mallow (*Malva neglecta*), and perennial ryegrass (*Lolium perenne*). Other species common on the project site include yellow star-thistle (*Centaurea solstitialis*), pigweed (*Amaranthus* sp.), common sowthistle (*Sonchus oleraceus*), cocklebur (*Xanthium strumarium*), and horseweed (*Conyza Canadensis*).

A row of trees, including walnut (*Juglans* sp.) and apricot (*Prunus* sp.), occurred along the western edge of the site, and a few ornamentals, including olive (*Olea europaea*) and Chinese tallow (*Sapium sebiferum*), were observed in the vicinity of the agricultural well. Additionally, an approximately 100- $ft^2$ patch of giant reed (*Arundo donax*) and a small willow (*Salix* sp.) were identified in the immediate vicinity of the agricultural well. The proximity of these hydrophytes to the well and the fact that they occurred within an upland setting suggest the well may have historically leaked.

Shallow swales supporting small, scattered patches of hydrophytic vegetation were observed along the eastern and southern margins of the site, adjacent to Lower Sacramento Road and Highway 12, respectively. The majority of the swales' reach supported upland vegetation, but patches of hydrophytic species were observed, including salt grass (*Distichlis spicata*), flatsedge (*Cyperus* sp.), vervain (*Verbena* sp.), smartweed (*Polygonum* sp.), and sandspurry (*Spergularia* sp.).

A small depression covered in dry, cracked soil was observed in the vicinity of the dirt and debris mounds in the eastern portion of the site. Because it lies adjacent to the fill mounds, this area was presumably excavated, with portions of the excavated material contributing to the mounds. Sufficient rainwater collects in this depression to allow for the establishment of a few scattered hydrophytes.

**Wildlife.** Vertebrates found in ruderal areas include many of those species found in developed habitats, and many species using adjacent areas likely forage in and move through the ruderal habitat. Common wildlife species include western fence lizards (*Sceloporus occidentalis*), Killdeer (*Charadrius vociferus*), House Finches (*Carpodacus mexicanus*), Western Meadowlarks (*Sturnella neglecta*), Red-winged Blackbirds (*Agelaius phoeniceus*), American Goldfinches (*Carduelis tristis*), Mourning Doves (*Zenaida macroura*), house mice (*Mus musculus*), black-tailed hares (*Lepus californicus*), and California ground squirrels (*Spermophilus beecheyi*).

This site is generally low in quality for wildlife due to its recent disturbance, a lack of native vegetation, and the proximity of human developments. In addition, evidence of disturbance of the site by a large canid, likely a dog (*Canis familiaris*), was found during the reconnaissance survey. The frequent presence of dogs may drive many native wildlife species out of an area.

## SPECIAL-STATUS PLANT AND WILDLIFE SPECIES

Prior to the site survey, information concerning the known distribution of threatened, endangered, or other special-status and significant plant and animal species that may occur in the area was collected from several sources and reviewed by H. T. Harvey & Associates' biologists. The sources included the California Department of Fish and Game's (CDFG) Natural Diversity Data Base (CNDDB 2002), the California Wildlife Habitat Relationships Program (CDFG 2002), the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Plants of California* (2001), *The Jepson Manual* (Hickman 1993), and the SJMSCP (San Joaquin Council of Governments 2000).

A search of published accounts of occurrences of these special-status species was conducted for the Lodi South, Lodi North, Terminous, Stockton West, Stockton East, Holt, Waterloo, Lockeford, and Thornton USGS Quadrangle maps. In addition, all plant species listed as occurring in San Joaquin County and present on CNPS' Lists 1A, 1B, 2, 3 and 4 were reviewed.

### Special-Status Plant Species

Four sensitive habitats were identified in the CNDDB query. These were northern hardpan vernal pool, coastal and valley freshwater marsh, great valley oak riparian forest, and valley oak woodland. None of these habitats occurs on the project site.

The majority of special-status plant species identified in the query occur in habitats not found on the project site, including vernal pool, freshwater marsh, chenopod scrub, meadows and seeps, riparian scrub, cismontane woodland, and valley and foothill grassland. The ruderal field habitat identified on the project site most closely resembles valley and foothill grassland, although the latter habitat does not truly occur on the project site. Additionally, the site lacks all of the microhabitat requirements for the special-status plant species identified as occurring in valley

and foothill grassland, including serpentine soils, strongly alkaline soils, heavy clay soils, lack of disturbance, or presence of associate species. Furthermore, a CNDDB query of occurrences of special-status plants within a 5-mile radius of the project site yielded only one plant, rose mallow (*Hibiscus lasiocarpus*), which occurs in freshwater marshes and swamps. Therefore, based on our survey, the results of reviewed databases, and the disturbed nature of the site (evidenced by a predominance of ruderal plants), it was determined that the site does not provide suitable habitat for any special-status plant species.

In June 2002, EIP Associates concluded that the project site did not provide suitable habitat capable of supporting any special-status plant species (EIP Associates 2002). This is consistent with the determination made by the H. T. Harvey & Associates' botanist.

**Special-Status Animal Species**

Some of the special-status animals occurring in the vicinity of the project are found in habitat types that are not present on-site, such as riparian habitat and freshwater pools and streams. The project is outside the known distribution of, or there is a lack of suitable habitat for the following species: valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), California tiger salamander (*Ambystoma californiense*), giant garter snake (*Thamnophis gigas*), western pond turtle (*Clemmys marmorata*), foothill yellow-legged frog (*Rana boylii*), California Black Rail (*Laterallus jamaicensis coturniculus*), and Tri-colored Blackbird (*Agelaius tricolor*).

*S*pecial-status species that may breed on the site and/or pose potential constraints to project development include the Swainson's Hawk (*Buteo Swainsoni*), Burrowing Owl (*Athene cunicularia*), Northern Harrier (*Circus cyaneus*), White-tailed Kite (*Elanus caeruleus*), Loggerhead Shrike (*Lanius ludovicianus*), and California Horned Lark (*Eremophila alpestris actia*). However, we observed no evidence of past nesting by any raptor within the project area during the reconnaissance survey, and due to the generally poor quality of the habitat and lack of suitable nest trees it is judged to be unlikely that Swainson's Hawks would breed on site. Nevertheless, Swainson's Hawks are known to occur within five miles of the project and may use the site for foraging. Ground nesting birds such as the Burrowing Owl, Northern Harrier, and California Horned Lark are also unlikely to nest on the site due to the generally low quality of the habitat and the level of ground disturbance (disking and dogs). Nevertheless, pre-construction surveys for each of the species listed above should be conducted to determine with acceptable certainty, based on established protocols, whether the species occupy the site. Then, if necessary, appropriate mitigation and minimization measures should be instituted (see below).

In June 2002, EIP Associates concluded that the single special-status wildlife species potentially occurring at the project site was the Swainson's Hawk, which might use the sight as foraging habitat (EIP Associates 2002). This assessment was based on a search of the CNDDB for recorded occurrences of special-status species in the project vicinity and a comparison of those species habitat requirements with the resources available at the project site. However, the absence of recorded occurrences for a species in the CNDDB does not preclude the possibility of its existence in an area if the site is within the species range and suitable habitat is present. Thus, the conclusion of the H. T. Harvey & Associates' wildlife biologist is that additional special-status species, listed above, may occur on the site.

## IDENTIFICATION OF REGULATED HABITATS

### United States Army Corps of Engineers Jurisdiction

A reconnaissance-level field survey was conducted within the project boundaries for potentially regulated habitats, including wetland and riparian plant communities. Activities conducted within such areas are potentially under the regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE) and CDFG. Surveys were conducted within the project boundaries for areas that meet the technical criteria of jurisdictional wetlands generally following the guidelines outlined in the "Routine Determination Method" in the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987). Additionally, surveys were also conducted for tributary waters (*i.e.*, incised seasonal or perennial drainages devoid of wetland vegetation); such areas extend to the Ordinary High Water mark on opposing channel banks. This mark is typically indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in character of soil, destruction of vegetation, exposed roots on the bank, deposition of leaf litter and other debris materials or lower limit of moss growth on channel banks.

**Survey Results.** Several features supporting some hydrophytic vegetation were observed on the project site (and were previously described in the biotic habitat section of this report). It is our conclusion that none of these features would fall under the regulatory jurisdiction of the USACE.

The swales located along the east and south property boundaries supported small, scattered patches of hydrophytic species. The topographic position of the swales allows sufficient runoff to collect from the adjacent roadways to support a few hydrophytes, although the majority of vegetation observed within these swales consisted of upland species. The shallow swales (2-6 inches in depth) exhibited no litter deposition, incision, or water lines and occurred within an upland setting.

The approximately 100-$ft^2$ patch of giant reed adjacent to the agricultural well became established in an upland setting with no apparent hydrology. Its proximity to the well is an indication that the well historically leaked, thereby providing sufficient soil moisture to support this patch of hydrophytic vegetation. It is relatively common for agricultural wells to develop leaks, and such leaks often provide sufficient water to support some hydrophytic vegetation.

The small depression adjacent to the dirt and debris mounds was covered in an approximately 2-inch thick, cracked and platy soil layer. Recent excavation and grading in this area may have compacted the soil enough to create this surface hardpan. Although the depression was mostly devoid of vegetation, a few, scattered hydrophytes were observed. This depression collects water for unknown duration. A soil pit was excavated within the depression to determine if the soil contained any hydric soil indicators, including the presence of organic soils, streaking of subsurface horizons, mottling, "rotten egg" odors from hydrogen sulfide, or organic pans. None of these indications were observed. Again, it is our conclusion that none of the areas described in the above section would fall under the regulatory jurisdiction of the USACE.

Based upon surveys conducted in June 2002, EIP Associates concluded that the project site did not contain any potential jurisdictional wetlands regulated by USACE (EIP Associates 2002).

They reported that they did not observe the presence of seasonal wetlands, vernal pools, swales, inundated areas, drainages, or other areas that could potentially be regulated. Although we did observe two swales and a topographic depression supporting a few hydrophytic species, and a patch of giant reed adjacent to the agricultural well, we also concluded that the site contained no potentially regulated habitats including wetlands.

**California Department of Fish and Game Jurisdiction**

The field survey also included a search for habitats potentially under the regulatory jurisdiction of the CDFG as described under Division 2, Chapter 6, Section 1600-1607 of the Fish and Game Code of California (Hernandez 1999). The CDFG potentially extends the definition of stream to include "intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams (USGS), and watercourses with subsurface flows. Canals, aqueducts, irrigation ditches, and other means of water conveyance can also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife" (CDFG 1994). Such areas on site were determined using methodology described in *A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607* (CDFG 1994).

**Survey Results.** No habitats potentially regulated by the CDFG were identified within the project site.

**Ordinance-Size Trees**

The City of Lodi has no regulations regarding the protection of any native or non-native trees.

## CONSISTENCY WITH THE REQUIREMENTS OF THE SJMSCP

The previous section of this document describes several special-status species that may be affected by the project. All permanent impacts to habitats within San Joaquin County, such as those on the project site, and the species to which associated impacts could occur are covered by the SJMSCP. While specific measures to minimize impacts to special-status species are implemented on a project-by-project basis, we have reviewed the measures outlined for those species potentially occurring on the project site. In addition to the measures outlined in the SJMSCP, we recommend that pre-construction surveys for Burrowing Owls be conducted according to the guidelines prepared by the Burrowing Owl Consortium (1993) and that pre-construction surveys for all nesting raptors include the project site as well as the area within 250' of the project boundaries. Following these guidelines will increase the likelihood that survey results are deemed acceptable by the CDFG.

The SJMSCP classifies the project site as Category B, Multi-purpose Open Space Land, which agrees with our assessment of the site as abandoned agriculture of low quality to most wildlife of interest. Under the SJMSCP Multi-purpose Open Space Land includes lands which do not qualify as Natural Lands, Agricultural Lands, or Urban Lands, but if converted contribute to the overall loss of Open Space for agriculture, recreation, scenic values and other beneficial Open Space uses. The conversion also affects plants, fish, and wildlife (San Joaquin Council of Governments 2000). The fee for individuals opting for coverage under the SJMSCP is currently $845/acre for conversion of Category B lands.

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